National Institute of Environmental Health Sciences

# Phlebotomine fauna in the urban area of Timóteo, State of Minas Gerais, Brazil

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**Abstract:**

This work is characterized by an entomological research and an investigation on whether seasonal behaviours can be associated to the phlebotomine fauna found in the urban area of Timóteo-MG - an endemic focus of tegumentary leishmaniasis (TL). The analysis of the seasonal behaviour of sand flies has taken into account the following climatic variables: rainfall, relative humidity and temperature. Automatic light traps were installed in households between 2009 and 2010. The sand fly species with the highest number captured was Lutzomyia whitmani (66.5%), a TL vector species, whose abundance has provided strong evidences that this species is the main vector of TL in the municipality of Timóteo, with its cycle of transmission developing in its urban area. Amongst the results observed in the analyses of seasonal behaviour, only temperature conveyed particular association between seasonal occurrence of sand flies and climate variables. The findings of this study may assist the local epidemiological surveillance agency in defining strategies and directing efforts for controlling these insects.

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## Resource Description

**Exposure :** ☑

weather or climate related pathway by which climate change affects health

Meteorological Factors, Precipitation, Temperature

**Temperature:** Fluctuations

**Geographic Feature:** ☑

resource focuses on specific type of geography

Mountain, Tropical, Urban

**Geographic Location:** ☑

resource focuses on specific location

Non-United States

**Non-United States:** Central/South America

**Health Impact:** ☑

specification of health effect or disease related to climate change exposure

Infectious Disease

**Infectious Disease:** Vectorborne Disease

**Vectorborne Disease:** Fly-borne Disease

**Fly-borne Disease:** Leishmaniasis

**Resource Type:**

format or standard characteristic of resource

Research Article

**Timescale:**

time period studied

Time Scale Unspecified